RESEARCH PROBLEM STATEMENT

Problem Title: Determination of Crash Costs for Use in Benefit/Cost Analysis **No.: 05.05.11**

Submitted By: Jim McMinimee and Doug Anderson **E-mail:**

1. Briefly describe the problem to be addressed:

The available information that is used to estimate benefit/cost for transportation related improvements should be reviewed. Very high estimates of crash costs have been used in the past. This appears to be a case where societal estimates are being used for analytical purposes. Current value used by UDOT is 3.1 Million.

Benefit/cost estimates for pavement management, bridge replacements, intersection analysis, safety, traffic congestion mitigation, and other transportation improvements need to be appropriate and comparable.

2. List the research objective(s) to be accomplished:

1. Review national studies performed on the subject. Health industry, life insurance industries, etc.
2. Identify other states practices.
3. Make recommendations with regards to the value for one human life in other industries
4. Create policy that can be sued by each of the areas listed above

3. List the major tasks required to accomplish the research objective(s): **Estimated person-hours**

1. Literature search, industry search
2. Create list of all the values used and how these values were determined
3. Summarize the research
4. Assemble a TAC that makes decision on what value to use and determine how this value will affect cost/benefit estimates, asset management, brides, etc.
5. Make Recommendations

4. Outline the proposed schedule (when do you need this done, and how we will get there):

One Year or ASAP
Literature Search has been done

5. Indicate type of research and / or development project this is:

Large: ☐ Research Project ☐ Development Project
Small: X Research Evaluation ☐ Experimental Feature ☐ New Product Evaluation ☐ Tech Transfer Initiative :
☐ Other_____

6. What type of entity is best suited to perform this project (University, Consultant, UDOT Staff, Other Agency, Other)?

7. What deliverable(s) would you like to receive at the end of the project? (e.g. useable technical product, design method, technique, training, workshops, report, manual of practice, policy, procedure, specification, standard, software, hardware, equipment, training tool, etc.)
A report documenting recommended values. The report will recommend policy for use UDOT Policies.

8. Describe how will this project be implemented at UDOT.
Ues their value to implement cost/benefit Analysis and establish a State Policy

9. Describe how UDOT will benefit from the implementation of this project, and who the beneficiaries will be.

UDOT has already been mandated to prioritize projects, and UDOT need a value that can be used

10. Describe the expected risks, obstacles, and strategies to overcome these.

Current Policy

11. List the key UDOT Champion of this project (person who will help Research steer and lead this project, and will participate in implementation of the results): Jim McMinimee

12. Estimate the cost of this research study including implementation effort (use person-hours from No. 3): $20,000

13. List other champions (UDOT and non-UDOT) who are interested in and willing to participate in the Technical Advisory Committee for this study:

Name	Organization/Division/Region	Phone	Attended UTRAC?
A) Paul Vidmar			
B) Jim McMinimee			
C) Doug Anderson			
D) Research			
E) Risk Management/Loss Control			
F) Traffic and Safety			
G) FHWA			

14. Identify other Utah agencies, regional or national agencies, or other groups that may have an interest in supporting this study:

UDOT